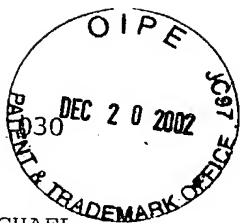


410.018
ARAND et al
Serial No.: 10/009,030



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For: EPOXIDE...ORIGIN

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78

<110> ARAND, MICHAEL
ARCHELAS, ALAIN ROBERT
BARATI, JACQUES
FURSTOSS, ROLAND

<120> EPOXIDE HYDROLASES OF ASPERGILLUS ORIGIN

<130> bml-410.018

<140> 10/009,030

<141> 2001-11-02

<150> PCT/FR00/01217

<151> 2000-05-05

<150> FR 99/05711

<151> 1999-05-05

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<170> PatentIn Ver. 2.1

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Asn Pro Phe Thr Val Ser Ile Pro Asp Glu Gln Leu Asp Asp Leu Lys	
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acc ctc gtc cga ctg tcc aag att gct cct ccc acc tat gag agc ctg	144
Thr Leu Val Arg Leu Ser Lys Ile Ala Pro Pro Thr Tyr Glu Ser Leu	
35 40 45	

caa gcg gat ggc cgg ttt ggc atc act tct gaa tgg ctg aca act atg	192
Gln Ala Asp Gly Arg Phe Gly Ile Thr Ser Glu Trp Leu Thr Thr Met	
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cgg gag aaa tgg ctc tcg gag ttt gac tgg cga cca ttt gaa gct cga	240
Arg Glu Lys Trp Leu Ser Glu Phe Asp Trp Arg Pro Phe Glu Ala Arg	
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Leu Asn Ser Phe Pro Gln Phe Thr Thr Glu Ile Glu Gly Leu Thr Ile	
85 90 95	

cac ttt gct gct ctc ttc tcc gag agg gag gat gct gtg cct atc gca	336
His Phe Ala Ala Leu Phe Ser Glu Arg Glu Asp Ala Val Pro Ile Ala	
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Leu Leu His Gly Trp Pro Gly Ser Phe Val Glu Phe Tyr Pro Ile Leu	
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Gln Leu Phe Arg Glu Glu Tyr Thr Pro Glu Thr Leu Pro Phe His Leu	
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gtt gtt ccg tcc ctt cct ggg tat act ttt tca tct ggt ccc ccg ctg	480
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Asp Lys Asp Phe Gly Leu Met Asp Asn Ala Arg Val Val Asp Gln Leu	
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Ile Gly Ser Phe Val Gly Arg Leu Leu Gly Val Gly Phe Asp Ala Cys	
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225 230 235 240	
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act cgg ccc agt act att ggc cac gtg ctg tcc agc agt ccg atc gca	816
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260 265 270	
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Leu Leu Ala Trp Ile Gly Glu Lys Tyr Leu Gln Trp Val Asp Lys Pro	
275 280 285	
ctc cct tct gag acc atc ctc gag atg gtg agc ctg tat tgg ctg acg	912
Leu Pro Ser Glu Thr Ile Leu Glu Met Val Ser Leu Tyr Trp Leu Thr	
290 295 300	
gaa agt ttc ccg cgg gca att cat acc tac cgc gag act acc cca act	960
Glu Ser Phe Pro Arg Ala Ile His Thr Tyr Arg Glu Thr Thr Pro Thr	
305 310 315 320	

gcc tcc gct ccc aat gga gcg aca atg ctt cag aag gaa tta tat att 1008
 Ala Ser Ala Pro Asn Gly Ala Thr Met Leu Gln Lys Glu Leu Tyr Ile
 325 330 335

cac aag ccg ttt ggg ttc tcc ttc ttc ccc aag gac ctt tgt cct gtg 1056
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 340 345 350

cct cgg agc tgg att gct aca acg gga aat cta gta ttc ttc cgg gat 1104
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 355 360 365

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 370 375 380

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 35 40 45

Gln Ala Asp Gly Arg Phe Gly Ile Thr Ser Glu Trp Leu Thr Thr Met
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Arg Glu Lys Trp Leu Ser Glu Phe Asp Trp Arg Pro Phe Glu Ala Arg
 65 70 75 80

Leu Asn Ser Phe Pro Gln Phe Thr Thr Glu Ile Glu Gly Leu Thr Ile
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His Phe Ala Ala Leu Phe Ser Glu Arg Glu Asp Ala Val Pro Ile Ala
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Leu Leu His Gly Trp Pro Gly Ser Phe Val Glu Phe Tyr Pro Ile Leu
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Gln Leu Phe Arg Glu Glu Tyr Thr Pro Glu Thr Leu Pro Phe His Leu
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Val Val Pro Ser Leu Pro Gly Tyr Thr Phe Ser Ser Gly Pro Pro Leu
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Asp Lys Asp Phe Gly Leu Met Asp Asn Ala Arg Val Val Asp Gln Leu
 165 170 175
 Met Lys Asp Leu Gly Phe Gly Ser Gly Tyr Ile Ile Gln Gly Gly Asp
 180 185 190
 Ile Gly Ser Phe Val Gly Arg Leu Leu Gly Val Gly Phe Asp Ala Cys
 195 200 205
 Lys Ala Val His Leu Asn Leu Cys Ala Met Arg Ala Pro Pro Glu Gly
 210 215 220
 Pro Ser Ile Glu Ser Leu Ser Ala Ala Glu Lys Glu Gly Ile Ala Arg
 225 230 235 240
 Met Glu Lys Phe Met Thr Asp Gly Leu Ala Tyr Ala Met Glu His Ser
 245 250 255
 Thr Arg Pro Ser Thr Ile Gly His Val Leu Ser Ser Ser Pro Ile Ala
 260 265 270
 Leu Leu Ala Trp Ile Gly Glu Lys Tyr Leu Gln Trp Val Asp Lys Pro
 275 280 285
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 Glu Ser Phe Pro Arg Ala Ile His Thr Tyr Arg Glu Thr Thr Pro Thr
 305 310 315 320
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 325 330 335
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 340 345 350
 Pro Arg Ser Trp Ile Ala Thr Thr Gly Asn Leu Val Phe Phe Arg Asp
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 PROCESSES FOR OBTAINING THEM, AND THEIR USES, IN
 PARTICULAR FOR THE PREPARATION OF ENANTIOMERICALLY
 PURE MOLECULES

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40 acc ctg gtc cga ctg tcc aag att gct cct ccc acc tat gag agc ctg 144
 Thr Leu Val Arg Leu Ser Lys Ile Ala Pro Pro Thr Tyr Glu Ser Leu
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45 caa gcg gat ggc cgg ttt ggc atc act tct gaa tgg ctg aca act atg 192
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50 cgg gag aaa tgg ctg tcg gag ttt gac tgg cga cca ttt gaa gct cga 240
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 His Phe Ala Ala Leu Phe Ser Glu Arg Glu Asp Ala Val Pro Ile Ala
 100 105 110

60 ttg ctg cat ggt tgg ccc ggc agc ttc gtt gag ttc tac cca atc ctg 384
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 115 120 125

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	Met	Glu	Lys	Phe	Met	Thr	Asp	Gly	Leu	Ala	Tyr	Ala	Met	Glu	His	Ser	
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	His	Lys	Pro	Phe	Gly	Phe	Ser	Phe	Phe	Pro	Lys	Asp	Leu	Cys	Pro	Val	
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Thr Leu Val Arg Leu Ser Lys Ile Ala Pro Pro Thr Tyr Glu Ser Leu
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25 Gln Ala Asp Gly Arg Phe Gly Ile Thr Ser Glu Trp Leu Thr Thr Met
 50 55 60

30 Arg Glu Lys Trp Leu Ser Glu Phe Asp Trp Arg Pro Phe Glu Ala Arg
 65 70 75 80

Leu Asn Ser Phe Pro Gln Phe Thr Thr Glu Ile Glu Gly Leu Thr Ile
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35 His Phe Ala Ala Leu Phe Ser Glu Arg Glu Asp Ala Val Pro Ile Ala
 100 105 110

Leu Leu His Gly Trp Pro Gly Ser Phe Val Glu Phe Tyr Pro Ile Leu
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40 Gln Leu Phe Arg Glu Glu Tyr Thr Pro Glu Thr Leu Pro Phe His Leu
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45 Val Val Pro Ser Leu Pro Gly Tyr Thr Phe Ser Ser Gly Pro Pro Leu
 145 150 155 160

Asp Lys Asp Phe Gly Leu Met Asp Asn Ala Arg Val Val Asp Gln Leu
 165 170 175

50 Met Lys Asp Leu Gly Phe Gly Ser Gly Tyr Ile Ile Gln Gly Gly Asp
 180 185 190

Ile Gly Ser Phe Val Gly Arg Leu Leu Gly Val Gly Phe Asp Ala Cys
 195 200 205

55 Lys Ala Val His Leu Asn Leu Cys Ala Met Arg Ala Pro Pro Glu Gly
 210 215 220

60 Pro Ser Ile Glu Ser Leu Ser Ala Ala Glu Lys Glu Gly Ile Ala Arg
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25	His	Ala	Glu	Gly	Gly	His	Phe	Ala	Ala	Leu	Glu	Arg	Pro	Arg	Glu	Leu	
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